

REMARKS

Please cancel Claims 7-10 and 20-22 without prejudice. Claims 1-6, 11-19 and 23-29 are pending. Claims 1, 14 and 23 are amended. No new matter is added as a result of the claim amendments. Support for the claim amendments can be found at least in the discussion of Figures 3A-3C and 4A-4C.

102 Rejections

The instant Office Action states that Claims 1-3, 11-15 and 23-24 are rejected under 35 U.S.C. § 102(b) as being anticipated by Yates, Jr. et al. (U.S. Patent No. 6,397,379; hereinafter "Yates"). The Applicants have reviewed the cited reference and respectfully submit that the present invention as recited in Claims 1-3, 11-15 and 23-24 is not anticipated by Yates.

Independent Claims 1, 14 and 23 each recite, in essence, embodiments in which multiple commit points are associated with a translation of non-native instructions into native instructions. Claim 23 further recites that an effective instruction pointer associated with the multiple commit points can be recovered. Claims 1 and 14 further recite that rollback is to one commit point while the translation is restarted at a different commit point.

Applicants do not find Yates to show or suggest the claimed features summarized above. Specifically, Applicants respectfully submit that Yates does not show or suggest "executing multiple commit operations during execution of said code sequence of native instructions such that there are multiple commit points associated with said translation; registering a first address for a native instruction associated with the last occurring commit point of said commit points;

registering a second address used for recovering a non-native instruction associated with the first occurring commit point of said commit points; performing a rollback operation to said last commit point; and restarting said translation at said first commit point" as recited in independent Claim 1; "accessing a translation of a code sequence of non-native instructions to a code sequence of native instructions, said code sequence of native instructions advancing from a first occurring commit point through multiple commit points to a last occurring commit point before a rollback operation; performing said rollback operation to return to said last commit point using a first address to locate a native instruction associated with said last commit point; and in conjunction with said rollback operation, using a second address to recover a non-native instruction associated with said first commit point to restart said translation" as recited in independent Claim 14; nor "accessing a translation of a code sequence of non-native instructions to a code sequence of native instructions, said translation producing multiple commit points when executed; taking an exception identified during execution of said translation; as a result of taking said exception, reading an address in a register, said address pointing to a native instruction having an indicator bit and a plurality of pointer bits, wherein depending on the value of said indicator bit, said pointer bits point either to a single effective instruction pointer for a non-native instruction associated with said multiple commit points or to information that can be used for recovering said effective instruction pointer" as recited in independent Claim 23.

Therefore, Applicants respectfully submit that the basis for rejecting independent Claims 1, 14 and 23 under 35 U.S.C. § 102(b) is traversed and that these claims are in condition for allowance. Accordingly, Applicants also submit

that the basis for rejecting Claims 2-3, 11-13, 15 and 24 under 35 U.S.C. § 102(b) is traversed, as Claims 2-3, 11-13, 15 and 24 are dependent on Claim 1, 14 or 23 and recite additional limitations.

103 Rejections

Claims 4-6 and 16-19

The instant Office Action states that Claims 4-6 and 16-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yates in view of Spix et al. (U.S. Patent No. 6,195,676; hereinafter "Spix"). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 4-6 and 16-19 is not shown or suggested by Yates and Spix, alone or in combination.

Claims 4-6 are dependent on independent Claim 1 and recite additional limitations, and Claims 16-19 are dependent on independent Claim 14 and recite additional limitations. Hence, by demonstrating that the cited references do not show or suggest the limitations of Claims 1 and 14, it is also demonstrated that the cited references do not show or suggest the limitations of Claims 4-6 and 16-19.

As presented above, Applicants respectfully submit that Yates does not show or suggest the limitations of Claims 1 and 14. Applicants also submit that Spix does not overcome the shortcomings of Yates. Specifically, Applicants respectfully submit that Spix, alone or in combination with Yates, does not show or suggest the limitations of Claims 1 and 14 cited above.

Therefore, Applicants respectfully submit that Claims 1 and 14 are allowable over the cited references. Accordingly, Applicants also submit that the basis for rejecting Claims 4-6 and 16-19 under 35 U.S.C. § 103(a) is traversed, as Claims 4-6 and 16-19 are dependent on allowable base claims.

Claims 25 and 29

The instant Office Action states that Claims 25 and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yates in view of Chung et al. (U.S. Patent No. 6,044,475; hereinafter “Chung”). The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 25 and 29 is not shown or suggested by Yates and Chung, alone or in combination.

Claims 25 and 29 are dependent on independent Claim 23 and recite additional limitations. Hence, by demonstrating that the cited references do not show or suggest the limitations of Claim 23, it is also demonstrated that the cited references do not show or suggest the limitations of Claims 25 and 29.

As presented above, Applicants respectfully submit that Yates does not show or suggest the limitations of Claim 23. Applicants also submit that Chung does not overcome the shortcomings of Yates. Specifically, Applicants respectfully submit that Chung, alone or in combination with Yates, does not show or suggest the limitations of Claim 23 cited above.

Therefore, Applicants respectfully submit that Claim 23 is allowable over the cited references. Accordingly, Applicants also submit that the basis for

rejecting Claims 25 and 29 under 35 U.S.C. § 103(a) is traversed, as Claims 25 and 29 are dependent on allowable base claims.

Claims 26-28

The instant Office Action states that Claims 26-28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yates in view of Spix and Chung. The Applicants have reviewed the cited references and respectfully submit that the present invention as recited in Claims 26-28 is not shown or suggested by Yates, Spix and Chung, alone or in combination.

Claims 26-28 are dependent on independent Claim 23 and recite additional limitations. Hence, by demonstrating that the cited references do not show or suggest the limitations of Claim 23, it is also demonstrated that the cited references do not show or suggest the limitations of Claims 26-28.

As presented above, Applicants respectfully submit that Yates and Chung, alone or in combination, do not show or suggest the limitations of Claim 23. Applicants also submit that Spix does not overcome the shortcomings of Yates and Chung. Specifically, Applicants respectfully submit that Yates, Spix and Chung, alone or in combination, do not show or suggest the limitations of Claim 23 cited above.

Therefore, Applicants respectfully submit that Claim 23 is allowable over the cited references. Accordingly, Applicants also submit that the basis for rejecting Claims 26-28 under 35 U.S.C. § 103(a) is traversed, as Claims 26-28 are dependent on allowable base claims.

Conclusions

In light of the above remarks, Applicants respectfully request reconsideration of the rejected claims.

Based on the arguments presented above, Applicants respectfully assert that Claims 1-6, 11-19 and 23-29 overcome the rejections of record, and therefore Applicants respectfully solicit allowance of these claims.

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

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Respectfully submitted,
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